

### AMENDMENTS TO THE CLAIMS

Please amend claims 1, 3, 8, 9, 11, 13, 14, 18-20, and 22, and cancel claim 21 without prejudice or disclaimer of its subject matter, as follows:

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- 1        1. (currently amended) An electron gun for a color cathode ray tube, the gun  
2        comprising:  
3              a cathode emitting an electron beam;  
4              a control electrode having first hole regions, each one of the first hole regions including  
5              a first vertically elongated indented portion formed at an output side surface of said control  
6              electrode and including a first hole portion formed in the first indented portion, the electron  
7              beam passing through said control electrode, the first hole portion having a shape selected from  
8              among circular and elongated ;  
B1        9              a screen electrode being installed adjacent to said control electrode, said screen electrode  
10        having second hole regions; and  
11        a plurality of focusing electrodes being sequentially installed from said screen electrode.
- 1        2. (original)     The electron gun of claim 1, the first vertically elongated indented  
2        portion being rectangular.
- 1        3. (currently amended) The electron gun of claim 2, ~~the first hole portion having one~~

2       shape selected from among circular and vertically elongated, — the first hole portion with the  
3       circular shape having vertical and horizontal widths equal to each other, the first hole portion  
4       with the vertically elongated shape having a vertical width and a horizontal width with the  
5       vertical width being greater than the horizontal width.

1           4.       (original)      The electron gun of claim 3, each one of the second hole regions  
2       having one shape selected from among circular and vertically elongated .

*B' control*  
1           5.       (original)      The electron gun of claim 3, each one of the second hole regions  
2       including a second indented portion formed at an output side surface of said screen electrode and  
3       a second hole portion formed in the second indented portion, the electron beam passing through  
4       the second hole portion.

1           6.       (original)      The electron gun of claim 5, the second indented portion having one  
2       shape selected from among circular and vertically elongated.

1           7.       (original)      The electron gun of claim 6, the second hole portion having one  
2       shape selected from among circular and vertically elongated, the circular second hole portion  
3       having vertical and horizontal widths equal to each other, the vertically elongated second hole  
4       portion having a vertical width greater than a horizontal width.

1        8. (currently amended) The electron gun of claim 2, the first hole portion with the  
2 elongated shape corresponding to a first hole portion having a having one shape selected from  
3 among circular and rectangular shape, the circular first hole portion having vertical and  
4 horizontal widths equal to each other, the rectangular first hole portion having a vertical width  
5 greater than a horizontal width.

1        9. (currently amended) The electron gun of claim 1, the first hole portion with the  
2 elongated shape corresponding to a first hole portion having a having one shape selected from  
3 among circular and rectangular shape, the circular first hole portion having vertical and  
4 horizontal widths equal to each other, the rectangular first hole portion having a vertical width  
5 greater than a horizontal width.  
  
*B1  
cont'd*

1        10. (original) The electron gun of claim 1, each one of the second hole regions  
2 having one shape selected from among circular and vertically elongated.

1        11. (currently amended) An electron gun for a color cathode ray tube, the gun  
2 comprising:  
3        a cathode emitting an electron beam;  
4        a control electrode having first hole regions, each one of the first hole regions including  
5        a first vertically elongated indented portion formed at an output side surface of said control  
6        electrode and including a first hole portion formed in the first indented portion, the electron

7        beam passing through said control electrode ;  
8            a screen electrode being installed adjacent to said control electrode, said screen electrode  
9        having second hole regions; and  
10          a plurality of focusing electrodes being sequentially installed from said screen electrode  
11        ~~The electron gun of claim 1, each one of the second hole regions including a second indented~~  
12        portion formed at an output side surface of said screen electrode and a second hole portion  
13        formed in the second indented portion, the electron beam passing through the second hole  
14        portion.

*B1  
Cont'd*  
12. (original) The electron gun of claim 11, the second hole portion having one  
2        shape selected from among circular and vertically elongated, the circular second hole portion  
3        having vertical and horizontal widths equal to each other, the vertically elongated second hole  
4        portion having a vertical width greater than a horizontal width.

1        13. (currently amended) An electron gun for a color cathode ray tube, the gun  
2        comprising:  
3            a cathode emitting an electron beam;  
4            a control electrode having first hole regions, each one of the first hole regions including  
5        a first vertically elongated indented portion formed at an output side surface of said control  
6        electrode and including a first hole portion formed in the first indented portion, the electron  
7        beam passing through said control electrode, the first hole portion having one shape selected

8        from among circular, elongated , and square;

9              a screen electrode being installed adjacent to said control electrode, said screen electrode  
10          having second hole regions; and

11              a plurality of focusing electrodes forming a plurality of quadrupole lenses, said focusing  
12          electrodes being sequentially installed from said screen electrode and respectively forming  
13          electron beam passing holes having a predetermined shape.

B1  
control

14. (currently amended) An electron gun for a color cathode ray tube, the gun  
comprising:

3              a cathode emitting an electron beam;

4              a control electrode having first hole regions, each one of the first hole regions including  
5              a first vertically elongated indented portion formed at an output side surface of said control  
6              electrode and including a first hole portion formed in the first indented portion, the electron  
7              beam passing through said control electrode;

8              a screen electrode being installed adjacent to said control electrode, said screen electrode  
9              having second hole regions; and

10              a plurality of focusing electrodes forming a plurality of quadrupole lenses, said focusing  
11              electrodes being sequentially installed from said screen electrode and respectively forming  
12              electron beam passing holes having a predetermined shape The electron gun of claim 13, said  
13          focusing electrodes comprising:

14              first, second, and third focusing electrodes, respectively having electron beam passing

15 holes forming a predetermined shape;  
16           a fourth focusing electrode being installed adjacent to said third focusing electrode, said  
17          fourth focusing electrode forming a first quadrupole lens; and  
18           a fifth focusing electrode being installed adjacent to said fourth focusing electrode, said  
19          fifth focusing electrode forming a second quadrupole lens.

1           15. (original) The electron gun of claim 14, further comprising a final acceleration  
2          electrode being installed adjacent to said fifth focusing electrode, said final acceleration  
3          electrode forming a main lens.

*B' Cont'd*  
1           16. (original) The electron gun of claim 15, said third and fourth focusing  
2          electrodes each having output side surfaces forming vertically elongated electron beam passing  
3          holes, said fourth and fifth focusing electrodes each having input side surfaces forming  
4          horizontally elongated electron beam passing holes, a constant voltage being applied to said  
5          screen electrode and said second focusing electrode, a focusing voltage higher than the constant  
6          voltage being applied to said first focusing electrode and said fourth focusing electrode, a  
7          dynamic focusing voltage using the focusing voltage as a base voltage being applied to said third  
8          and fifth focusing electrodes.

1           17. (original) The electron gun of claim 16, each one of the second hole regions  
2          including a second indented portion formed at an output side surface of said screen electrode and

3        a second hole portion formed in the second indented portion, the electron beam passing through  
4        the second hole portion.

1              18. (currently amended) An electron gun for a color cathode ray tube, the gun  
2        comprising:  
3        a cathode emitting an electron beam;  
4        a control electrode having first hole regions, each one of the first hole regions including  
5        a first vertically elongated indented portion formed at an output side surface of said control  
6        electrode and including a first hole portion formed in the first indented portion, the electron  
7        beam passing through said control electrode ~~The electron gun of claim 1, the first hole portion~~  
having one shape selected from among circular, vertically elongated, and square;  
9        a screen electrode being installed adjacent to said control electrode, said screen electrode  
10      having second hole regions; and  
11      a plurality of focusing electrodes being sequentially installed from said screen electrode.

B1  
cont'd

1              19. (currently amended) An electron gun for a color cathode ray tube, the gun  
2        comprising:  
3        a cathode emitting an electron beam;  
4        a control electrode having first hole regions, each one of the first hole regions including  
5        a first elongated indented portion formed at an output side surface of said control electrode and  
6        including a first hole portion formed in the first indented portion, the electron beam passing

7       through said control electrode;

8               a screen electrode being installed adjacent to said control electrode, said screen electrode  
9       having second hole regions; and  
10               a first plurality of focusing electrodes forming a plurality of quadrupole lenses, said first  
11       plurality of focusing electrodes being sequentially installed from said screen electrode and  
12       respectively forming electron beam passing holes , said first plurality of focusing electrodes  
13       comprising:

14               a second plurality of focusing electrodes, respectively having electron beam  
15       passing holes;

16               an additional focusing electrode being installed adjacent to said second plurality  
17       of focusing electrodes, said additional focusing electrode forming a first quadrupole lens;  
18       and

19               a next focusing electrode being installed adjacent to said additional focusing  
20       electrode, said next focusing electrode forming a second quadrupole lens ~~The electron~~  
21       ~~gun of claim 13, the first hole portion having one shape selected from among circular,~~  
22       ~~vertically elongated, and square.~~

1               20. (currently amended) An apparatus emitting electron beams, the apparatus

2       comprising:

3               at least two cathodes emitting electron beams, said at least two cathodes being arranged  
4       substantially in a horizontal line; and

5           a control electrode having first hole regions, each one of the first hole regions including  
6        a first vertically elongated indented portion formed at an output side surface of said control  
7        electrode and including a first hole portion formed in the first indented portion, at least one of  
8        the electron beams passing through said control electrode, the first hole portion having one shape  
9       selected from among circular, elongated, and square.

1           21.     (canceled)

1           22.     (currently amended) An apparatus emitting electron beams, the apparatus  
2       comprising:

3           at least two cathodes emitting electron beams, said at least two cathodes being arranged  
4       substantially in a horizontal line;

5           a control electrode having first hole regions, each one of the first hole regions including  
6       a first vertically elongated indented portion formed at an output side surface of said control  
7       electrode and including a first hole portion formed in the first indented portion, at least one of  
8       the electron beams passing through said control electrode; and ~~The apparatus of claim 20, further~~  
9       comprising:

10          a screen electrode being installed adjacent to said control electrode, said screen electrode  
11        having second hole regions, each one of the second hole regions including a second indented  
12       portion formed at an output side surface of said screen electrode and a second hole portion  
13       formed in the second indented portion, at least one of the electron beams passing through the

$\beta^1$   
 $(\alpha\beta)^{14}$

second hole portion.